Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_

Chapter 11 Quiz

**Matching:**

\_\_\_\_ 1. Heredity A. The “father of genetics”

\_\_\_\_ 2. Mendel B. Another name for factors that determine traits

\_\_\_\_ 3. Phenotype C. Plants that are able to fertilize themselves to produce offspring

\_\_\_\_ 4. Gene D. Physical characteristics of genes

\_\_\_\_ 5. Homozygous E. The passing of traits from parents to offspring

\_\_\_\_6. True-Breeding F. If self-pollinated produce offspring identical to themselves

\_\_\_\_ 7. Cross-Pollination G. The offspring of crossing parents with different characteristics

\_\_\_\_ 8. Alleles H. Two identical alleles for a trait

\_\_\_\_ 9. Self-pollinators I. The form of a gene only expressed in the homozygous state

\_\_\_\_10. Dominant J. Different forms of a gene

\_\_\_\_11. Heterozgous K. Two different alleles for a trait

\_\_\_\_ 12. Recessive L. Fertilization of ovules by pollen from a different plant

\_\_\_\_ 13. Hybrids M. A gene that is expressed if present with a contrasting recessive

allele

14. Some mice have gray coats (G) and some mice have white coats (g). One mouse is homozygous gray coated and the other mouse is heterozygous gray coated. Complete the Punnett square below to determine probability of the characteristics of the offspring of these parents. Show all work!

1. What are the genotypes of the parents?
2. What is the genotypic ratio?
3. What is the phenotypic ratio?

15. Some plants are tall (T) and some are short (t). Some seeds are round (R) and some are wrinkled (r). The two parents have the following phenotypes: plant one is homozygous tall and heterozygous round seeds, and plant two is homozygous tall and heterozygous round seeds. Show all work to determine the offspring of these two parent pea plants.

1. What are the genotypes of the parents?
2. What is the genotypic ratio?
3. What is the phenotypic ratio?

16. Describe how Mendel cross-pollinated two pea plants. Use the correct terminology (plant parts) in your description.